

REMARKS

The claims remaining in the application are 1-2, 4-5, 7-11, 15-20, 24-26, and 32-46. Claims 3, 6, 12-14, 21-23, 27-31, and 47-62 are canceled herein without prejudice to the Applicant's right to submit them later in a continuing application. Claims 1 and 18 are amended.

The Applicant would like to thank the Examiner for the quick and courteous Office Action; the Applicant is particularly appreciative of the allowance of claims 37-46, and the withdrawal of the Harms reference. The Applicant also greatly appreciates the indication in the Advisory Action that the Applicant's reply of 4 May 2006 overcame the rejections of claims 15-17 and 32-36. Additionally, the Applicant would like to thank the Examiner for the quick and courteous Office Action of July 31, 2006.

35 U.S.C. §102(b) Rejection Over Card, et al.

The Examiner rejected claims 1-23 and 27-36 under 35 U.S.C. §102(b) as being allegedly anticipated by U.S. Pat. No. 5,877,127 to Card, et al.

The Examiner finds that Card, et al. teaches a method of fracturing a subterranean formation in which an aqueous fluid gelled with a polysaccharide, and containing a polyol within the scope of the present invention is used. As in the present invention, the Examiner finds that heat and pH control agents are used. The Examiner contends that the Applicant's discovery of the inherent property of the polyol acting as a breaker does not distinguish over the prior art, citing *In re Tomlinson*.

The Examiner noted in the final Office Action of March 10, 2006 that the Applicant's previous arguments were considered, but were not deemed fully persuasive. The Examiner asserts that with respect to Card, et al. most of the Applicant's arguments were done in regard to obviousness, whereas in the instant case an anticipation rejection was made. The Examiner contends that since Card, et al. places the composition, comprising the same polyol in the formation, under the same conditions, it is not seen absent a showing by Applicant how such could produce a different result. Again, the Examiner alleges that Applicant's discovery of an allegedly inherent property of the polyol acting as a breaker does not distinguish over the prior art.

The Examiner also noted in the Advisory Action of May 19, 2006 that the May 4, 2006 Amendment does not place the application in condition for allowance because Card, et al. teaches that a breaker is optional. The Examiner asserts that none of Card, et al.'s examples includes an oxidizer breaker or an enzyme, and that Card, et al. teaches that connate water and heat act as breakers. The Examiner thus contends that other means of breaking are contemplated. The Examiner alleges that with respect to galactose, such is taught as useful in the invention even if it [is] not a preferable embodiment, citing *In re Lamberti*.

The Applicant respectfully traverses.

A patent claim is anticipated, and therefore invalid, only when a single prior art reference discloses each and every limitation of the claim. *Glaxo Inc. v. Novopharm Ltd.*, 52 F.3d 1043, 1047, 34 U.S.P.Q.2d 1565 (Fed. Cir.), cert. denied, 116 S.Ct. 516 (1995).

The Examiner's attention is respectfully directed to the amendments to the claims herein, where independent method claim 1 has been amended to recite an abbreviated list of the polyols of dependent claim 6 (which has been canceled). Because these polyols were recited in claim 6 as originally filed, their inclusion in claim 1 does not constitute an improper insertion of new matter. The polyol is now defined as one "selected from the group consisting of glycerol, glucose, lactose, rhamnose, mannose, alkyl glucoside and mixtures thereof".

The Applicant respectfully directs the Examiner's attention to claim 18 as amended herein where the claim has been changed to recite that the only polyol is mannose.

As previously noted, Card, et al. teaches that only certain polyols are suitable to provide delay time and stabilize the fracturing fluid in their method, as noted in column 11, lines 44-57:

Suitable polyols are those that provide adequate delay time and stabilize the fracturing fluid at the end use conditions of the fracturing process. Suitable polyols are preferably those that have an equilibrium constant ( $K_{eq} = k_2$  at 25°C.) of at least  $10^3$ , preferably at least  $10^4$ . Examples of such suitable polyols include fructose, sorbitol, gluconic acid and salts thereof, e.g., sodium gluconate, glucoheptonic acid and salts thereof, e.g., sodium glucoheptonate, mannitol, ribose, arabinose, and xylose. *Polyols which have been demon-*

strated not to be suitable in the method of the present invention include glucose, ethylene glycol, glycerol, mannose, and rhamnose. Each of these materials have a  $K_{eq}$  less than  $10^3$ . One polyol which is not as preferable is galactose. (Emphasis added.)

Card, et al. explicitly and directly discloses and teaches a number of polyols to *not* be suitable in their method of providing delay time and stabilizing the fracturing fluid, namely: glucose, ethylene glycol, glycerol, mannose, rhamnose and galactose. Card, et al. does not teach or suggest or disclose what the effect of these polyols are, and is silent about any effect, other than that they are *not* suitable for the Card, et al. method.

Applicant respectfully submits that the claims as amended are now limited to only those polyols which are recited in the Examiner has previously allowed and/or which are recited in Card, et al.'s list as unsuitable for their process, and thus which they explicitly teach against.

As previously noted, claim 1 (and claims 2-5 and 7-11 dependent thereon) now recite glycerol, glucose, lactose, rhamnose, mannose, alkyl glucoside and mixtures thereof. Claims 15-17 and 32-36 are directed to the case where the polyol is glucose, and have been indicated as allowed by the Examiner in the Advisory Action. Claims 18-20 are directed to the case where the polyol is mannose, which is in the Card, et al. list.

It is respectfully submitted that because the single prior art reference does not disclose each and every limitation of the claims, the instant rejection is overcome and should be withdrawn. Reconsideration is respectfully requested.

#### Other Breakers

The phrase "in the absence of an oxidizer breaker or an enzyme breaker" had been deleted from claim 1 in the 09 June 2006 Amendment, since the Examiner did not find it distinguishing over the art. However, the Examiner in the July 31, 2006 Advisory Action indicated that this amendment to claim 1 would again render the claims rejectable over Harms, et al. since as shown in claim 2, the acid, and acid salts of the polyol are considered to be a part of the invention. The Examiner thus indicated that the 09 June 2006 Amendment would not be entered because it raised new issues that would require further consideration and/or search, and that it was not deemed to place the application in better form for appeal.

In this instant Amendment, the language "in the absence of an oxidizer breaker or an enzyme breaker" has been retained in claim 1. Thus, the Applicant respectfully submits that the claims again cannot be rejected over Harms, et al., and that the Amendment may be entered, and such entrance is respectfully requested. The claims are again allowable over Harms, et al. It is respectfully submitted that the subject Amendment does not raise new issues that would require further consideration and/or search, and that it does place the application in better form for appeal. Reconsideration is respectfully requested.

Request for Entry of Amendment

The Applicants would respectfully submit that the instant Amendment be entered under 37 CFR §1.116(b): "Amendments presenting rejected claims in better form for consideration on appeal may be admitted." It is respectfully noted that many claims have been newly canceled herein. Specifically, claims 6, 12-14, 21-23, and 27-31 have been canceled. Claims 1 and 18 have been significantly narrowed. The present claims are also allowable over Harms, et al. once again, it is respectfully submitted. It is respectfully submitted that for all of these reasons alone, which simplify and narrow the issues, and which present the claims in better condition for appeal, the instant Amendment should be entered.

It is respectfully submitted that the amendments and arguments presented above overcome the rejections and place the claims in condition for allowance. Reconsideration and allowance of the claims are respectfully requested. The Examiner is respectfully reminded of his duty to indicate allowable subject matter. The Examiner is also invited to call the Applicant' attorney at the number below for any reason, especially any reason that may help advance the prosecution.

Respectfully submitted,  
JAMES B. CREWS,

  
David L. Mossman

Registration No. 29,570  
Attorney for Applicant  
Telephone No. 512/219-4026  
Facsimile No. 512/219-4036